SAFETY DATA SHEET: POTASSIUM PERSULFATE

1. IDENTIFICATION

Product Name: POTASSIUM PERSULFATE
Synonyms: Potassium peroxydisulfate; Peroxydisulfuric acid dipotassium salt
Formula and Formula Weight: K2S2O8 270.32
Integra numbers beginning with: S786.10
Recommended Use: Commercial/industrial use
Restrictions on Use: No information available

INTEGRA Chemical Company
24 Hour Emergency Response: CHEMTREC 800-424-9300 (Outside USA 703-527-3887)
1216 6th Ave N
Kent WA 98032
Phone: 253-479-7000

2. HAZARDS IDENTIFICATION

<table>
<thead>
<tr>
<th>OSHA Classification</th>
<th>Hazard Category</th>
<th>Hazard Statement</th>
</tr>
</thead>
<tbody>
<tr>
<td>Acute Toxicity - Oral</td>
<td>4</td>
<td>Harmful if swallowed.</td>
</tr>
<tr>
<td>Skin Corrosion/Irritation</td>
<td>2</td>
<td>Causes skin irritation.</td>
</tr>
<tr>
<td>Eye Damage/Irritation</td>
<td>2A</td>
<td>Causes serious eye irritation.</td>
</tr>
<tr>
<td>Sensitization - Respiratory</td>
<td>1</td>
<td>May cause allergy or asthma symptoms or breathing difficulties if inhaled.</td>
</tr>
<tr>
<td>Sensitization - Skin</td>
<td>1</td>
<td>May cause an allergic skin reaction.</td>
</tr>
<tr>
<td>Specific Target Organ Toxicity (single exposure)</td>
<td>3</td>
<td>May cause respiratory irritation.</td>
</tr>
<tr>
<td>Oxidizing Solids</td>
<td>3</td>
<td>May intensify fire; oxidizer.</td>
</tr>
</tbody>
</table>

Signal Word: Danger

Precautionary Statements

Prevention:
Keep away from heat.
Keep and store away from clothing, combustible materials.
Avoid breathing dust.
Wash thoroughly after handling.
Do not eat, drink or smoke when using this product.
Use only outdoors or in a well-ventilated area.
Contaminated work clothing must not be allowed out of the workplace.
Wear protective gloves, eye protection, face protection, respiratory protection.

Response
If swallowed: Rinse mouth. Call a poison center, doctor if you feel unwell.
If on skin: Wash with plenty of water.
If inhaled: Remove person to fresh air and keep comfortable for breathing.
If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
Call a poison center, doctor if you feel unwell.
Specific treatment (see first aid section on this label)
If skin irritation or a rash occurs: Get medical advice, attention.
If eye irritation persists: Get medical advice, attention.
If experiencing respiratory symptoms: Call a poison center, doctor.
Take off contaminated clothing and wash it before reuse.

Storage
Store locked up in a well ventilated place. Keep container tightly closed.

Disposal
Dispose of contents, container in accordance with all governmental regulations.

Hazard Not Otherwise Classified: No information available

3. COMPOSITION/INFORMATION ON INGREDIENTS

<table>
<thead>
<tr>
<th>Component</th>
<th>Synonyms</th>
<th>CAS #</th>
<th>% Weight</th>
</tr>
</thead>
<tbody>
<tr>
<td>Potassium persulfate</td>
<td>Potassium peroxydisulfate; Peroxydisulfuric acid dipotassium salt</td>
<td>07727-21-1</td>
<td>100</td>
</tr>
</tbody>
</table>

4. FIRST AID MEASURES
Inhalation: Remove person to fresh air and keep comfortable for breathing. If experiencing respiratory symptoms, call a poison center or doctor.

Eye Contact: Flush eyes with water for at least 15 minutes. Seek immediate medical attention.

Skin Contact: Wash with soap and water. Seek medical attention if irritation develops.

Ingestion: Rinse mouth and give victim large quantities of water. Never give anything by mouth to an unconscious person. Seek immediate medical attention.

Additional notes: Symptoms and effects include skin, eye, respiratory, gastrointestinal irritation; allergy or asthma symptoms, breathing difficulties; allergic skin reaction; nausea, vomiting, burns to mouth and throat.

5. FIRE-FIGHTING MEASURES

Extinguishing Media: Water spray, carbon dioxide, dry chemical or foam.

Special Equipment and Precautions: Use water to cool nearby containers and structures. Wear full protective equipment, including suitable respiratory protection.

Specific Hazards: Strong oxidizer. Contact with combustible or flammable materials can cause fire or explosion.

Hazardous combustion products: Oxides of sulfur, Oxides of potassium

6. ACCIDENTAL RELEASE MEASURES

Spill Procedures: Remove all potential ignition sources. Prevent spread of spill. Wear suitable protective equipment. Sweep or scoop into disposal container in a manner that minimizes dust dispersion. Flush spill area with water. Do not release material to environment.

Ingestion: Rinse mouth and give victim large quantities of water. Never give anything by mouth to an unconscious person. Seek immediate medical attention.

Skin Contact: Wash with soap and water. Seek medical attention if irritation develops.

Eye Contact: Flush eyes with water for at least 15 minutes. Seek immediate medical attention.

Inhalation: Remove person to fresh air and keep comfortable for breathing. If experiencing respiratory symptoms, call a poison center or doctor.

Flammability: Not available

Upper: Not available

Lower: Not available

Additional notes: Symptoms and effects include skin, eye, respiratory, gastrointestinal irritation; allergy or asthma symptoms, breathing difficulties; allergic skin reaction; nausea, vomiting, burns to mouth and throat.

7. HANDLING AND STORAGE


Storage and Handling: Store locked up in a cool, dry, well-ventilated area dedicated to the storage of oxidizers. Keep away from incompatible materials, especially flammable or combustible materials. Keep containers tightly closed and protect them from physical damage. Protect material from exposure to air and moisture. Keep away from heat. Keep and store away from clothing, combustible materials. Avoid breathing dust. Wash thoroughly after handling. Do not eat, drink or smoke when using this product. Use only outdoors or in a well-ventilated area. Contaminated work clothing must not be allowed out of the workplace. Wear protective gloves, eye protection, face protection, respiratory protection.

8. EXPOSURE CONTROLS AND PERSONAL PROTECTION

OSHA & ACGIH Exposure Limits:

Potassium persulfate

ACGIH TWA: 0.1 mg/m3 (as persulfate)

Engineering Controls: Use general or local exhaust ventilation to meet TLV and PEL requirements.

Respiratory Protection: Respiratory protection required if airborne concentrations exceed PEL or TLV. Use a NIOSH approved full facepiece respirator with a particulate filter.

Skin/Eye Protective Equipment: Safety goggles, protective clothing and gloves appropriate for the risk of exposure.

Facilities storing or utilizing this material should have readily accessible eyewash stations and safety showers. Select respirators and other safety equipment in accordance with regulations and based upon the particular conditions of use and risk of exposure. Always use safe chemical-handling and good industrial hygiene practices.

9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance: White crystalline powder

Odor: Odorless

Odor Threshold: Not available

pH: 2.5 - 4.5 for a 3% solution at 25°C

Melting/Freezing Point: 100 °C

Initial Boiling Point and Boiling Range: Not available

Flash Point: Not available

Evaporation Rate: Not available

Flammability: Not available

Flammable or Explosive Limits (% by volume in air) Upper: Not available

Lower: Not available

Vapor Pressure: Not available

Vapor Density: 9.3

Relative Density: 2.48 g/cc

Solubility: Soluble in water

Partition Coefficient: n-octanol/water Not available

Auto-Ignition Temperature: Not available

Decomposition Temperature: 170

Viscosity: Not available

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10. STABILITY AND REACTIVITY
Reactivity: No information available
Stability: Stable
Possibility of Hazardous Reactions: Hazardous polymerization will not occur
Conditions to Avoid: Heat and moisture.
Incompatibilities: Incompatible with strong bases. Reducing agents, organic or combustible materials, powdered metals, alcohols, phosphorous, anhydrides, halogens, acids.
Decomposition Products: Oxides of sulfur, oxides of potassium

11. TOXICOLOGICAL INFORMATION
Effects of Over Exposure:
Inhalation: Inhalation may irritate the nose, throat and upper respiratory tract. May cause allergy or asthma symptoms or breathing difficulties.
Skin Contact: Contact may cause skin irritation. May cause allergic skin reaction.
Eye Contact: May irritate or burn the eyes.
Ingestion: Harmful if swallowed. Ingestion may cause nausea, vomiting and gastrointestinal irritation and burns to the mouth and throat.
Chronic Effects: May cause skin and respiratory sensitization.
Target Organs: No information available
Additional Effects: No information available
Reproductive Effects: No information available
Carcinogenicity: None identified
Toxicity Data:
Potassium persulfate  LD50 (oral, rat)  825 mg/kg

12. ECOLOGICAL INFORMATION
Aquatic Toxicity Data: No information available
Terrestrial Toxicity Data: No information available

13. DISPOSAL CONSIDERATIONS
Disposal Procedures: Dispose of material and containers in accordance with all local, state and federal regulations.

14. TRANSPORTATION INFORMATION
This product is a regulated material for domestic ground transportation, per CFR Title 49.
UN Number: UN1492
Proper Shipping Name: Potassium persulfate
Packing Group: III
Hazard Class: 5.1
Environmental hazards: No information available
Special precautions: No information available
Bulk transport: No information available

15. REGULATORY INFORMATION
Potassium persulfate is listed in the TSCA inventory.

16. OTHER INFORMATION
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The information presented above is offered for informational purposes only. This SDS, and the associated product, is intended for use only by technically qualified persons, and at their own discretion and risk. Since conditions and manner of use are outside the control of Integra Chemical Company, we make no warranties, either expressed or implied, and assume no liability in connection with any use of this information.

***** END OF SDS *****

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